

REMARKS

Claims 1-5 are pending.

Claims 1-5 are rejected over the combination of Hugh, U.S. 6,117,687 in view of Yoshida, et al., U.S. 6,029,101.

As set forth in the Specification, the present invention is directed to a novel system for maintaining the CO₂ gas concentration in an incubation chamber at a pre-set desired level. This becomes a problem when the door to the chamber is opened and closed, particularly on a frequent basis. In prior art devices, when the correction was made to bring the pressure in the chamber back to the desired value, the gas supplied after the door was closed would often overshoot or undershoot the desired value. This caused inaccuracies in the specimens being processed.

In accordance with the invention, a PID controller is used to control the supply of CO₂ to the chamber based on the difference between the measured value and the set desired value.

Claim 1 has been amended to better describe the operation of the various elements of the claim.

The principal reference to Hugh shows a conventional incubator. Hugh does not recognize the problem sought to be solved by the present invention, as set forth in claim 1. Therefore, he does not teach or suggest the use of the PID controller.

For the PID controller, the Examiner relies on the secondary reference to Yoshida. This patent describes a stirred bioreactor tank. That is, there is a tank that has a liquid as distinguished from the incubator chamber of the invention. Further, the PID controller of Yoshida responds to the Ph of the culture liquid. It does not respond to CO₂ gas as in the present invention.

The combination of Yoshida (liquid culture in which Ph is measured) with Hugh to achieve the present invention as claimed is not logical. It would not be reasonable to insert the liquid Ph detector of Yoshida into the culture in a CO₂ chamber. Further, the combination of the two references may not even be operative. Neither Hugh nor Yoshida recognizes the problem the invention solves, this being the change of CO₂ in the incubator chamber when the chamber door is opened, nor does either offer a solution to such problem as found in the novel subject matter of the present invention.

Therefore, main claim 1 is clearly patentable over the combination of references and should be allowed.

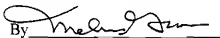
The other claims in the application depend from main claim 1 and recite additional features that provide further novelty. For example, as set forth in claims 3-5, the prior art does not teach or suggest control of CO₂ in a plurality of chambers in an incubator in the manner accomplished by the invention. Clearly, the dependent claims also are patentable and also should be allowed.

The other art cited has been considered and is not deemed pertinent.

Prompt and favorable action is requested.

Dated: May 2, 2007

Respectfully submitted,

By 

Melvin C. Garner

Registration No.: 26,272
DARBY & DARBY P.C.
P.O. Box 5257
New York, New York 10150-5257
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant